

**AMENDMENTS TO THE CLAIMS**

Claims previously submitted:

1. Claims 1 – 51 (Canceled)
52. (Currently amended) A fossil fuel composition comprising a base fuel and at least one additive wherein the additive comprises:
  - a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
53. (Currently amended) The fossil fuel composition of claim 52, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
54. (Currently amended) The fossil fuel composition of claim 52 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
55. (Currently amended) The fossil fuel composition of claim 52, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
56. (Currently amended) The fossil fuel composition of claim 52 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
57. (Currently amended) The fossil fuel composition of claim 52 wherein the thermal stabilizer is meadowfoam oil.
58. (Currently amended) The fossil fuel composition of claim 52 further comprising a diluent.

59. (Currently amended) The fossil fuel of claim 52 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~fossil fuel~~, diesel fuel, gasoline, jet fuel, 2 cycle oil, resid fuel and mixtures thereof.
60. (Currently amended) The fossil fuel composition of claim 52 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
61. (Canceled)
62. (Currently amended) A fossil fuel composition comprising a base fuel and at least one additive wherein the additive comprises:  
a hydrophobic plant oil extract;  
a carotenoid; and  
a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.
63. (Currently amended) The fossil fuel composition of claim 62 wherein the plant oil extract is derived from a member of the Leguminosae family.
64. (Currently amended) The fossil fuel composition of claim 62 wherein the plant oil extract is derived from grain.

65. (Currently amended) The fossil fuel composition of claim 62 further comprising a diluent.
66. (Currently amended) The fossil fuel composition of claim 62 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~fossil fuel~~, gasoline, diesel fuel, jet fuel, 2 cycle oil and resid fuel and mixtures thereof.
67. (Currently amended) The fossil fuel composition of claim 62 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
68. (Currently amended) The fossil fuel composition of claim 62, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
69. (Currently amended) The fossil fuel composition of claim 62 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
70. (Currently amended) A fossil fuel composition comprising a base fuel and at least one additive wherein the additive comprises:  
a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;

a carotenoid; and  
a thermal stabilizer.

71. (Currently amended) The fossil fuel composition of claim 70 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
72. (Currently amended) The fossil fuel composition of claim 70, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
73. (Currently amended) The fossil fuel composition of claim 70 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
74. (Currently amended) The fossil fuel composition of claim 70 wherein the thermal stabilizer is meadowfoam oil.
75. (Currently amended) The fossil fuel composition of claim 70 further comprising a diluent.
76. (Currently amended) The fossil fuel composition of claim 70 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, ~~fossil fuel~~, gasoline, jet fuel, diesel fuel, 2 cycle oil and resid fuel and mixtures thereof.
77. (Currently amended) The fossil fuel composition of claim 76 further comprising at least one additive selected from the group consisting of octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy

additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.

78. (Canceled)
79. (Canceled)
80. (Canceled)
81. (Canceled)
82. (Canceled)
83. (Previously presented) A fossil fuel additive comprising:
  - a hydrophobic plant oil extract;
  - a carotenoid;
  - a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof; and
  - a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, gasoline, jet fuel, diesel fuel, 2 cycle oil, resid fuel and mixtures thereof.
84. (Previously presented) The additive of claim 83 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
85. (Previously presented) The additive of claim 83 further comprising meadowfoam oil.
86. (Canceled)
87. (Canceled)
88. (Original) A fossil fuel additive comprising:
  - a plant oil extract derived from barley;

$\beta$ -carotene; and  
meadowfoam oil.

89. (Original) The additive of claim 88 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, fossil fuel, diesel fuel, gasoline, jet fuel, 2-cycle oil, resid fuel and mixtures thereof.
90. (Original) A fossil fuel additive comprising:  
barley oil;  
 $\beta$ -carotene; and  
meadowfoam oil.